

WE CLAIM:

1. A device for dosed dispensing of flowable material components, the device comprising:

at least one supply container receiving a material component, each supply container having an outlet;

at least one removal means, each removal means having an inlet, wherein said removal means and said supply container can be moved relative to each other to dock said inlet of said removal means with said outlet of said supply container;

a screw means disposed for rotation within said supply container in a region of said outlet, said screw means for removing the material component from said supply container in dosed charges, said screw means having an outlet side screw coupling means, said screw coupling means having a closing piece sealing said outlet of said supply container;

a controllable drive disposed in a region of said inlet of said removal means, said controllable drive having a drive shaft with a drive coupling means structured for connection to said screw coupling means for secure mutual rotation therewith;

means for exerting an axial spring force on said closing piece to hold said closing piece in sealing abutment on said outlet;

and

a suction gripper integral with said drive coupling means for lifting said closing piece from said outlet in opposition to said spring force.

2. The device of claim 1, wherein said screw means comprises a hollow shaft in which a tension spring is disposed to generate said spring force acting on said closing piece.
3. The device of claim 1, wherein said drive has a drive shaft with an axial channel having a first end extending to said drive coupling means and a second opposite end connected to a suction nozzle to constitute said suction gripper.
4. The device of claim 1, wherein one of said drive and said screw coupling means has at least two coupling pins cooperating with corresponding bores in a facing side of the other one of said drive and said screw coupling means, wherein connection for secure mutual rotation is provided through engagement of said coupling pins into said bores.
5. The device of claim 1, wherein said screw coupling means and said closing piece are formed as a one-piece, disc-shaped component.
6. The device of claim 1, wherein said drive can be displaced together with said drive shaft and said removal means into a docking position in which said inlet of said removal means is connected to said outlet of said supply container.
7. The device of claim 1, wherein after docking of said removal means, said drive can be displaced together with said drive shaft into a coupling position in which said screw and said drive coupling means engage.
8. The device of claim 1, wherein said drive can be displaced with said drive shaft into a removing position in which said drive coupling

means and said closing piece are removed from said outlet of said supply container under an action of said suction gripper.

9. The device of claim 1, wherein said removal means has a docking ring surrounding said inlet and surrounding said outlet of said supply container in a docking position.
10. The device of claim 1, wherein said drive can be displaced with said drive shaft by means of a pneumatic cylinder.
11. The device of claim 1, further comprising container scales, a transport frame and a flexible connection, wherein said container scales are connected downstream of said removal means for gravimetric detection of a dosed material component, said container scales being displacable to several supply containers along and on said transport frame, wherein said removal means and said drive are disposed on said transport frame to collect different material components, said flexible connection being provided between said removal means and said container scales for decoupling said scales from said drive and said removal means.